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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/655,964	09/06/2000	David M. Singleton	TH0681N (US)	9045
23632 7590 10/09/2007 SHELL OIL COMPANY P O BOX 2463 HOUSTON, TX 772522463			EXAMINER OGDEN JR, NECHOLUS	
			ART UNIT 1796	PAPER NUMBER
			MAIL DATE 10/09/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/655,964	Applicant(s) SINGLETON ET AL.	
	Examiner Necholus Ogden	Art Unit 1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7-20-2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-8,12,70,72,73,75-77 and 79-109 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-8,12, 70, 72, 73, 75-77,79-109 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

1. Claims 1-4,6-8,12, 70, 72, 73, 75-77,79-109 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 91/16409.

WO '409 disclose a liquid detergent composition comprising a primary alcohol sulfate, wherein said sulfate are made commercially available under Lial 125, Dobanol 25, Empicol Lx, and Texapon (page 3, lines 10-19). WO '409 teaches that at least 20% of the sulfate component is branched (page 5, lines 22-30).

Accordingly, WO '409 lacks the specific teaching of the atom branching and skeletal isomerization.

It would have been obvious to one of ordinary skill in the art to formulate a biodegradable primary alcohol sulfate with the specification as claimed, because WO '409 teaches that the commercially available sulfates are biodegradable (Lial 125) and branched. With respect to the specific atom branching and the skeletal isomerization, it is the examiners position that the claims are directed to the same compound(s) as disclosed in WO '409 and many of the commercially available products possess many of the similar characteristics were one of ordinary skill in the art, in the absence of a showing to the contrary would reasonably construe the sulfates of WO '409 encompassing the claimed sulfate. Furthermore, it has been held that a prima facie case of obviousness may be made when chemical compounds have very close structural similarities and similar utilities. "An obviousness rejection based on similarity in chemical structure and function entails the motivation of one skilled in the art to make a claimed compound, in the expectation that compounds similar in structure will have

similar properties." In re Payne, 606 F.2d 303, 313, 203 USPQ 245, 254 (CCPA 1979). See In re Papesch, 315 F.2d 381, 137 USPQ 43 (CCPA 1963) and In re Dillon, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1991).

With respect to the skeletal isomerization process, it is held that "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

1. Claims 1-4,6-8,12, 70, 72, 73, 75-77,79-109 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 85/02175.

WO '175 discloses a detergent composition for use as biodegradable detergents wherein said compositions comprise C14 alcohols having branching at the 2-position and an additional methyl branch. The alcohols have a limited vicinal substitution and no di-substituted carbon chain atoms (i.e. quaternary carbon atom). Note, see pages 5-7.

WO '175 lacks applicant's specific teachings of branches per molecule.

It would have been obvious to one of ordinary skill in the art to expect similar characteristics and properties from the sulfated alcohols of WO '175 because they are the same compounds but different isomers. However, absent a showing to the contrary, it has been held that a prima facie case of obviousness may be made when chemical compounds have very close structural similarities and similar utilities. "An obviousness

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rejection based on similarity in chemical structure and function entails the motivation of one skilled in the art to make a claimed compound, in the expectation that compounds similar in structure will have similar properties." In re Payne, 606 F.2d 303, 313, 203 USPQ 245, 254 (CCPA 1979). See In re Papesch, 315 F.2d 381, 137 USPQ 43 (CCPA 1963) and In re Dillon, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1991).

Moreover, compounds which are position isomers (compounds having the same radicals in physically different positions on the same nucleus) are generally of sufficiently close structural similarity that there is a presumed expectation that such compounds possess similar properties. In re Wilder, 563 F.2d 457, 195 USPQ 426 (CCPA 1977). See also In re May, 574 F.2d 1082, 197 USPQ 601 (CCPA 1978) (stereoisomer prima facie obvious).

Response to Arguments

2. Applicant's arguments filed 7-20-07 have been fully considered but they are not persuasive.
3. The declaration under 37 CFR 1.132 filed 11-30-2006 is insufficient to overcome the rejection of claims 1-4,6-8,12, 70, 72, 73, 75-77,79-109 based upon WO 91/16409 as set forth in the last Office action because: The declaration is not commensurate in scope with the claimed invention. Specifically, applicant compares Neodol-45 with a "similar" composition of Lial 125 as disclosed in WO '409. The data is given little weight because applicant does not describe what the differences are between the tested LR-98, LR-36 and LR-37 and how it compares to the Lial 125. Moreover, the examiner is confused by the Declaration, which asserts "that there is great difference in multisebum

detergency between Neodol-45, which is a material which is similar to the claimed branched alcohol sulfates, as compared to Neodol-45 alcohol sulfate,....and Lial-145 was only slightly better." First, are applicant comparing two different fractions of Neodol-45 and secondly, is Lial-145 similar to the Lial 125 as recited in WO '409?

4. An affidavit or declaration under 37 CFR 1.132 must compare the claimed subject matter with the closest prior art to be effective to rebut a prima facie case of obviousness. In re Burckel, 592 F.2d 1175, 201 USPQ 67 (CCPA 1979). "A comparison of the claimed invention with the disclosure of each cited reference to determine the number of claim limitations in common with each reference, bearing in mind the relative importance of particular limitations, will usually yield the closest single prior art reference." In re Merchant, 575 F.2d 865, 868, 197 USPQ 785, 787 (CCPA 1978)

Where the comparison is not identical with the reference disclosure, deviations therefrom should be explained, In re Finley, 174 F.2d 130, 81 USPQ 383 (CCPA 1949), and if not explained should be noted and evaluated, and if significant, explanation should be required. In re Armstrong, 280 F.2d 132, 126 USPQ 281 (CCPA 1960).

5. With respect to applicant's argument that WO '175 is not a close structurally to the claimed compounds of the instant application and therefore would not have been obvious.

The examiner contends and respectfully disagrees because WO '175 teach biodegradable branched sulfates it would have been obvious to optimize the branching

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of the specific alcohols and optimize the branching by utilizing well-known natural feedstock as recited above in the absence of a showing to the contrary.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Necholus Ogden whose telephone number is 571-272-1322. The examiner can normally be reached on M-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on 571-272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Mecholus Ogden
Primary Examiner
Art Unit 1751

No
9-29-2007